

## Eating behaviour dimensions and anthropometric indicators of adiposity and diet in Ecuadorian adults

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### **Background and objectives:**

Obesity is a growing and multifactorial pathology. There is a need to understand the cognitive-behavioral nature of food intake and its interaction with obesity. Among the cognitive-behavioral, two dimensions of eating behavior (EB) have been identified: uncontrolled and emotional, each with its own etiology. The aim of our work was to understand the link between the emotional and uncontrolled dimensions of the EB, adiposity indicators, and diet in a sample of overweight Ecuadorian adults.

### **Methodology:**

Two hundred adults ( $34.5 \pm 6.3$  years; 30% female) were recruited from the Nutrition Service from the general Hospital “Pedro Carbo” in Guayaquil-Ecuador. The following variables as parameters of adiposity were determined: BMI, waist circumference, visceral fat percentage and fat mass percentage and diet intake (3, 24-hour food recalls). EB were evaluated with the validated Three Factor Eating Questionnaire (TFEQ). The relationships between eating behaviors and obesity parameters were determined by ANCOVA adjusted by sex, age and physical activity level.

### **Results and conclusions:**

Adults identified as high-emotional or high-uncontrolled eaters showed higher values of energy intake ( $p < 0.001$ ). On the other hand, the intake of all macronutrients was also higher in both high emotional or high-uncontrolled eaters ( $p < 0.001$ ). These individuals classified as high-emotional or high-uncontrolled eaters showed also higher values of BMI ( $p < 0.05$ ), higher waist circumference values ( $p < 0.001$ ) and higher values of fatty mass ( $p < 0.001$ ). Individual differences in EB may explain in part variations in diet, development of weight gain (adiposity), and subsequent obesity.

The nutritional therapies should be redirected towards the predominance of the alimentary behavior of the patients.

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